

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/006108

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B22D2/00 B22D11/18 B22D37/00 G01N27/74 G01N33/20 C21C5/46		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 B22D G01N C21C		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, PAJ, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 816 758 A (THEISSEN WOLFGANG ET AL) 28 March 1989 (1989-03-28) abstract column 3 - column 5; figures 1-5	2,3,9, 17,18,29
Y		4-7,16, 19-23
X	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 05, 30 April 1998 (1998-04-30) & JP 10 005958 A (NIPPON STEEL CORP), 13 January 1998 (1998-01-13) abstract	2,3,10, 17,18, 24,29
Y A		16 10-14, 24-27
----- -/-		
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
* Special categories of cited documents : <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>*A* document defining the general state of the art which is not considered to be of particular relevance</p> <p>*E* earlier document but published on or after the international filing date</p> <p>*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>*O* document referring to an oral disclosure, use, exhibition or other means</p> <p>*P* document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>*Z* document member of the same patent family</p> </div> </div>		
Date of the actual completion of the international search	Date of mailing of the international search report	
28 July 2004	30/08/2004	
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax (+31-70) 340-3016	Authorized officer Baumgartner, R	

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/006108

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 54 119336 A (KAWASAKI STEEL CO; EDDIO CORP) 17 September 1979 (1979-09-17)	2-4, 16-19, 29
Y	figures 1-4	4-7, 16, 19-23
X	JP 54 110932 A (KAWASAKI STEEL CO) 30 August 1979 (1979-08-30)	2-4, 17-19, 28, 29
Y	figures 1, 2	4-7, 16, 19-23
X	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 01, 30 January 1998 (1998-01-30) & JP 09 236461 A (NIPPON STEEL CORP), 9 September 1997 (1997-09-09) abstract	2, 3, 8, 17, 18, 29
X	DE 31 42 681 A (LICENTIA GMBH) 5 May 1983 (1983-05-05) abstract page 6 - page 8; figures 1, 2	2, 3, 9, 17, 18, 29
X	WO 02/36293 A (JALK MATS ; OHLSSON WILLY (SE); CERVANTES MICHEL (SE); KELVESJOE HA) 10 May 2002 (2002-05-10) the whole document	17, 24, 29
X	US 4 144 756 A (LINDER STEN V) 20 March 1979 (1979-03-20) the whole document	17, 24